

# the rui / AITE monthly

MOVING BEYOND PAPERS

Greetings, Ruiaites !

Our month began with an onslaught of heavy, pouring rains. Most of you must have enjoyed it in your own way, assuming that lucky souls did not get stuck anywhere in between. So now, watching the drizzling Mumbai streets through your windowpane and reading through this edition you will travel across a wide range of diverse facets and splendid phenomena.

We have Buzz Around covering the Assam and Bihar floods. It's a testament to their struggles that must be shared with everyone. You have a journey to be completed as Fictionally Yours has got something to say about the happenings in travel. Wanderlust will surely bring out the holiday plans in your head. And Safarnama will help you in figuring out the how's of it. They have provided a guide of the best countries to club together for customized tours.

This time Insight shows the darker side of fairy tales and myths. Science of Everything talks about eclipses in relation to the phases of moon and also discovers the true story behind zodiac signs. Behind every story are several perspectives and multiple dimensions. Tech-Tricked has wonderfully captured this connection by discussing about the open ended camera feature in smartphones. Behind the Scenes wants to reach the story behind the filtered picture. It has analyzed the psychology within interactions in the society.

As a healthy mind can only dwell in a healthy body , Careerwise has provided glimpses about the fitness related fields. Op Ed talks about the changing tastes of consumers with regard to the evolving environment. Open Forum takes a rocket to the extraterrestrial with an analysis of the second, ongoing space race and lands on the curious case of Area 51. Lastly, Art Wall depicts the Renaissance music in it's own unique way, and explores the facets of it's expression.

Enthusiasm and excitement in creation do get reflected and reciprocated with enjoyment on the other hand. We hope you enjoy your August, everyone! Celebrate every festival to the fullest with your friends and families, and have a great time!

- Editorial Team





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# BUZZ AROUND



# KARNATAKA HAVOC

The 2018 Karnataka assembly elections resulted in the formation of a coalition of the Indian National Congress and Janata Dal (Secular) with a combined majority of 120 out of 224 seats. Although BJP could only manage to secure 104 seats in 2018, they swept the 2019 general elections by winning 26 out of 28 seats.

In an attempt to save the Karnataka government, a total of 16 MLAs had submitted their resignations over the course of a few weeks. This is to enable the reconstitution of a fresh cabinet by accommodating dissatisfied MLAs. The reaction of the government was to convince the MLAs who had submitted their resignations to revoke them. Many of the MLAs fled to Mumbai and directed the police to bar Congress leaders from meeting them. All 21 ministers of Congress resigned on July

8 to make sure that there were enough ministerial berths available.

The speaker, K.R. Ramesh Kumar, did not immediately accept the resignations, on the grounds that he was constitutionally obliged to scrutinize them.

After losing the vote of confidence which missed a couple of deadlines, Karnataka CM H.D. Kumaraswamy-led government officially collapsed on 23rd July. After losing the trust vote Kumaraswamy submitted his resignation to the governor which was accepted immediately. He agreed on terms of being a caretaker CM until alternative arrangements are made. This ended a 14 month long turbulent tenure of the coalition government and a three week long intense power struggle triggered by ample of resignations.

With rebellion exploding in its face, the coalition government was hanging by a thread for the last three weeks with the Supreme Court verdict that rebel law makers ought not to be compelled to attend the session tipping the scales in favour of the BJP. Flashing the victory sign after the voting, BJP leader B S Yeddyurappa, who is hoping to become the chief minister for the fourth time, described the outcome as a "victory for democracy" as people were fed up with the Kumaraswamy government.

Two days after the collapse of the government, the speaker of the parliament disqualified 3 rebel MLAs under the anti-defection law. The disqualified MLAs Mahesh Kumathalli, R Shankar and Ramesh Jarkiholi, cannot contest election until the end of the current assembly session in 2023.

*Chinmay Parulekar,  
Columnist, TYBSc*



# SIMPLY PUT

## Bihar and Assam Flood

***1. Since when did the flooding begin in Bihar and Assam and till now what is the death toll?***

Ans. - Floods hit Bihar and Assam on 14th July. The death toll mounted to 174, with a total of 1.09 crore people being affected by the calamity in both the states as of July 24. 204 animals including 15 rhinos have died in the Kaziranga National Park since July 15.



## ***2. What was the extent of destruction in the states?***

Ans.- Around 65 lakh people of 889 panchayats across 12 districts in north Bihar have been affected by floods while 60 blocks are fully affected and 24 partially affected. People have become homeless, displaced and are wading through neck-deep waters. In Assam, more than 27,000 hectares of farmland have been flooded and 14 lakh people have got affected in 25 districts. The railway services have also been affected.

## ***3. What has led to flooding in Bihar?***

Ans.- Bihar is a flood-prone region; however, the frequency of floods has increased in recent years. The “Sapta Kosi” (Seven Rivers) - Indrawati, Sunkosi, Tambakosi, Lihu Khola, Dudhkosi, Arun and Tamur - are the tributaries of the Kosi river. These flow through a narrow gauge of 11 km, before spreading over the Gangetic plains. As a result of the sudden decrease in slope

below the mouth of the gorge, an inland delta is formed.

There has been a huge surge in the conversion of forests into agricultural and pastoral land in the middle hills of Nepal which significantly contributes to the flood damage in India. Secondly, the flood damage is people have been increasingly occupying the flood plains. Though the state government has built about 3000 kms of embankment, the flow of the river has grown 2.5 times resulting in the failure of embankments in every flood.

## ***4. What measures have been taken by the Bihar Government to tackle the deluge?***

Ans. - Chief Minister Nitish Kumar expressed concern over the ‘grim flood situation’ in the state and has assured all help for relief and rescue operations. An aerial survey was also taken. The NDRF and the Army were sent promptly by the Central Government. 254 relief camps have been set up for

the affected people.

## ***5. Why does Assam get flooded every year?***

Ans.- Some of the factors include bank erosion around the Brahmaputra and Barak rivers along with its tributaries, unregulated release of water from dams, the encroachment of forests and water bodies, as well as the non-implementation of the Brahmaputra dredging project.

## ***6. What are the measures taken by the Assam Government to tackle the deluge?***

Ans. - Sixty-eight relief camps have been set up across Assam. Assam CM Sarbananda Sonowal sought NITI Aayog’s intervention to include river erosion in the admissible list of calamities for funding under the NDRF or SDRF so that quick and timely steps can be taken to counter erosion.



**7. Who all have contributed to the Assam Chief Minister's Relief Fund?**

Ans.- Many citizens across the country have donated to the Chief Minister's Relief Fund including actors Akshay Kumar and Amitabh Bachchan who have contributed Rs. 2 crore and Rs.51 lakh respectively.

**8. What are the preventive measures necessary to tackle the situation of floods in Bihar?**

Ans. - A number of structural changes needs to be done in order to tackle the flood situation which include building of Detention basins, locally called 'chaurs,' which absorb a considerable amount of water of the first flood. The

maintenance and repair of the embankments on the River Kosi should be done timely in order to reduce the damage.

**9. What are the preventive measures necessary to tackle the situation of floods in Assam?**

Ans.- Early warning systems based on scientific approach can provide a long-term hope to this flood – prone state. Wetlands and local water bodies which act as a natural drainage system should be revived so that the excess water will flow out. Clearing human encroachments in the Brahmaputra flood plains. Timely checking of embankments to locate any breaches.

*Swati Achwal,  
Columnist, SYBSc*



# TOP TEN NEWS

1. India launched its most awaited Chandrayaan-2, which began its 48-day journey to the south pole of the moon where it will begin its quest for water.
2. Congress-JD(S) government in Karnataka dissolved while BJP'S BS Yediyurappa takes oath as the new Chief Minister of Karnataka.
3. Triple Talaq bill gets passed in the Lok Sabha.
4. Senior Congress leader and three time Delhi Chief Minister, Sheila Dixit passes away at the age of 81.
5. India's Hima Das bags Five Gold medals for the country internationally in sprinting.
6. Rajya sabha passed the Protection of Children from Sexual offences Bill, 2019.
7. MS Dhoni makes himself unavailable for the West Indies series and has started training for his Territory Battalion Parachute regiment to be deployed in Kashmir.
8. Over 700 people stranded on "Mahalakshmi Express" due to the onset of heavy rains. Combined rescue operations carried out by Army, Navy and NDRF.
9. GST council trims rate on electric vehicles, charges to 5%.
10. Boris Johnson appointed as the new Prime Minister of the United Kingdom.

# TWITTER TWEET

BY RAHUL GANDHI:  
Government is diluting RTI in order to help the corrupt steal from India. Strange that the normally vociferous anti-corruption crowd has suddenly disappeared.  
#GovtMurdersRTI.

*Riddhi Solanki,  
Columnist, TYBSc*





# BEHIND THE SCENES

## BEYOND ME TOWARDS ME

There's times when we do irrational or dumb things. There's times when someone tries really hard to fit in with a group. There's times when a group of friends band together against the same person who hurt one of their friends. Why does this happen? What causes the brain to act this way? How do people behave in certain situations and why? This month's issue addresses these questions by taking a deep dive into social psychology.

Social psychology aims to study the patterns seen in human social interactions, as well as shed light on how certain situations make people behave in a peculiar manner. Our attitudes, our beliefs and experiences, the urge to obey authority figures, among other things are all studied under the umbrella of social psychology. It has quickly become a much-talked-about discipline in the past few years. It provides answers to a plethora of questions.

Let's have a look at a simple example explaining our behavior: Flavoured Residency. A newly constructed housing society in the heart of a

beautiful town, Escape Land. Slowly and steadily people were taking charge of their flats and completely unknown faces started popping up from the flavoured windows. A, B, C, D and E were five such strangers residing here who one fine day landed up in the colony's blossom park.

Initially, there was a kind of confused silence in the atmosphere as each one wanted to talk but was waiting for someone else to initiate the conversation. Gradually, these random people began discussing about general topics like weather and became acquaintances. They used to meet almost everyday in the park. Eventually they understood that their preferences, likings match and they share similar interests in many spheres. And now the same people who once hesitated to communicate with each other, formed a friendly group. Now these A, B, C, D and E used to visit each other's places, go out together for movies and plays, enjoy the holidays with feasts and parties. As their relationship started building up, their interactions started evolving and

revolving in different dimensions. Now they were comfortable in sharing even their deepest secrets and darkest fears with one another. The worrisome concerns, ridiculous regrets, far-gone grudges were expressed freely in this Escape Land and were given a way out.

It did happen that at times there were differences of opinions, mismatches of mindsets. The idea of not being able to get along did pop up at intended intervals, but the strong and in depth bonding between them and the storming and norming paved the foundation for a deep rooted and healthy relationship. Over a period A, B, C, D and E became an intact part of each other's life. One just could not imagine life without the other. Hope, joy, serenity, gratitude and love showered in this Flavoured Residency because of these five friends. They stood by each other, celebrated the mesmerizing moments and tackled over the sorrows. And then the sun rose on that unwanted day. A, B, C, D and E had to shift back to their native places as their contract in the residency had come to an end. Though

there was assurance of constant contact, the real-time physical attachment was going to be missed. This depicts why human attachment is an intrinsic part of our lives. The psychology of humankind has intrigued us for a long time now. We may have different backgrounds and personalities, may speak different languages and have different lifestyles, but

we are bound by a common thread of behaving in similar ways and having a similar kind of psychology in certain situations. Here are a few theories that attempt to discuss and explain our social behaviour and general pattern of thinking that have been seen as common in most humans.

The "Attribution Theory" tries to explain the human need to attribute a cause to any incident, event and their actions and behaviours to them sometimes in a rather unreasonable way. The attribution theories and models are generalised into external and internal attribution. External attribution, also called situational attribution, refers to the phenomenon in which we interpret someone's behaviour as being caused by the situation the person is put into. It could be something as small as finding reasons for being angry in a situation,

or attributing a reason for why things are going wrong when in reality it could be due to another reason altogether. Internal attribution or dispositional attribution, on the other hand, refers to the process in which we tend to assign causes to some internal characteristic like ability to inspiration rather than the influence of external factors.

There is an interesting concept called "Cognitive Dissonance" which takes place when we are faced with two or more contradictory facts about a certain thing or situation and are unable to maintain a consistent thought process that we believe is required to function smoothly. In order to minimise this, our brain tends to make connections and adds new facts in order to make it seem more consistent and understandable.

An account of attitude formation developed by psychologist Daryl Bem, Self Perception Theory, says that we tend to develop our attitudes by observing our own behaviour and making conclusions about which attitudes might have caused it. It suggests that we induce these attitudes without accessing our moods or inner cognition state. A person tends to explain their behaviour in the same rational way as they do with

others. "Social Comparison Theory" proposed by Leon Festinger in 1954 centers on the belief that we as individuals are always driven to get accurate evaluations about ourselves. It explains how we evaluate our opinions and abilities by comparing ourselves to others to reduce uncertainty or ignorance about them. It explains how we like to define ourselves and see how we are placed relative to others.

Though it is a difficult task, psychologists have performed various experiments related to social psychology and their findings are really mind-blowing.

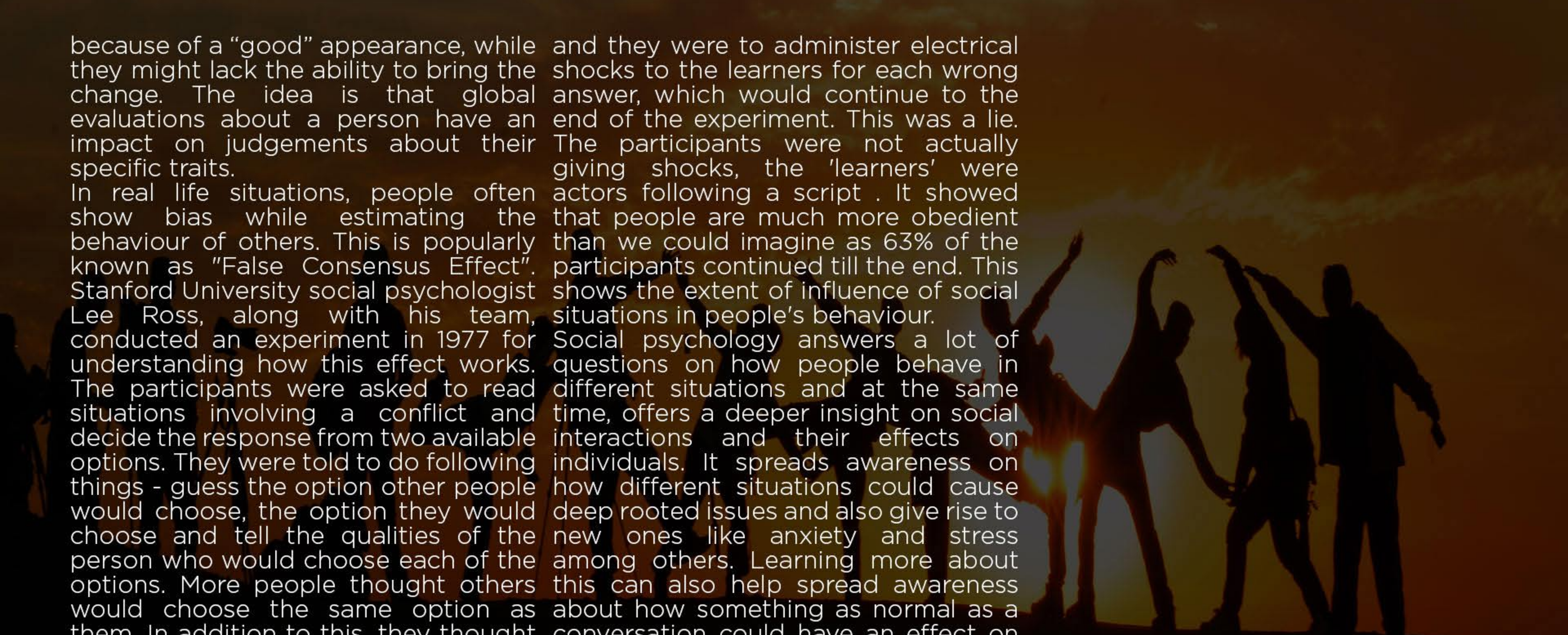
In 1977, psychologists Nisbett and Wilson carried out an experiment of examining the way students judged a lecturer. The students were divided into two groups, one group watched the video of a lecturer answering questions in an extremely warm and friendly manner and the other group watched the same lecturer answering questions in a cold and distant manner. When they were told to rate the lecturer, the first group rated him more likeable and attractive. This is nothing but "Halo effect". People pay hefty amount of money just for the name of a fashion designer, they tend to think policies of a politician are good just

because of a "good" appearance, while they might lack the ability to bring the change. The idea is that global evaluations about a person have an impact on judgements about their specific traits.

In real life situations, people often show bias while estimating the behaviour of others. This is popularly known as "False Consensus Effect". Stanford University social psychologist Lee Ross, along with his team, conducted an experiment in 1977 for understanding how this effect works. The participants were asked to read situations involving a conflict and decide the response from two available options. They were told to do following things - guess the option other people would choose, the option they would choose and tell the qualities of the person who would choose each of the options. More people thought others would choose the same option as them. In addition to this, they thought that those who didn't agree with them have something wrong with them. This study shows that people are really poor intuitive psychologists. The "Obedience Authority" experiment was carried out to know how far humans can go to obey the orders of an authority figure. Participants were told that it was a learning experiment

and they were to administer electrical shocks to the learners for each wrong answer, which would continue to the end of the experiment. This was a lie. The participants were not actually giving shocks, the 'learners' were actors following a script. It showed that people are much more obedient than we could imagine as 63% of the participants continued till the end. This shows the extent of influence of social situations in people's behaviour.

Social psychology answers a lot of questions on how people behave in different situations and at the same time, offers a deeper insight on social interactions and their effects on individuals. It spreads awareness on how different situations could cause deep rooted issues and also give rise to new ones like anxiety and stress among others. Learning more about this can also help spread awareness about how something as normal as a conversation could have an effect on someone. Isn't it intriguing how changes in the social environment - no matter how small - affect our brain and in turn, our behaviour?





# CAREERWISE

“Health should be your topmost passion for a better life.”

## Fitness tech engineers

Ever wondered what sports combined with engineering would be like?

Footwear built for speed, tennis rackets that produce the perfect spin and ‘fast-skin’ swimming costumes – top athletes rely on cutting edge equipment created by engineers and scientists. Being good at sport is not necessary, but a good aptitude for science is essential. The sports engineer requires expertise in many technical skills; from mechanical design to aerodynamics, material science to computer modelling. Sports engineering or a fitness tech engineering is about the design and optimisation of the equipment that athletes use. The field is very broad and encompasses many different disciplines – from improving the hull design of a racing yacht, to understanding the mechanics of cricket ball bounce. For example, sport engineers are responsible for the introduction of a new type of goalkeeper’s glove, made using a complex elastomeric compound called d30 developed at the University of Hertfordshire. It is a shear-thickening material which is soft and flexible when moved slowly, but when it is shocked into motion – for example, when compressed by an impact – its molecules lock together. The material stiffens, absorbing the impact. This provides shock absorption which protects the goalie’s hands without compromising the flexibility of the glove. You could end up designing equipment or working with athletes to understand their interaction with the equipment and help them improve their performance. You could even work with governing bodies to assess the effects of a change in the rules or understand injury risks and how to reduce them. Careers in sports engineering are real but they are less abundant than in other fields of engineering. One way to get into this sort of work is to do a Masters degree in biomechanics or software engineering. Another option is to go in at the technician level. To do this you need to do an apprenticeship or a National diploma in engineering. Students may then be offered the opportunity to train at a higher level. Sports engineering is a constantly growing area, as people look to technology to improve performance, so someone with the right skills and qualifications should have a good chance of getting a job. So if you are fond of sports but at the same time love your skills in the field of engineering too this is the perfect combo offer for you!

## Pilates instructor

- The ability to identify client readiness for specific mat exercises
- How to implement best practices, fitness resources, and equipment
- How to communicate effectively and professionally with clients

As a Pilates instructor, you’ll obtain the skills to plan a class, provide posture corrections, build confidence in your students, and so much more.

### 3. Study for the exam and take the exam. Finally get certified as a Pilates instructor.

Getting certified in the Pilates should take six months or less, and your program will likely consist of a variety of learning modules, comprehensive manuals, quizzes, video lessons, and a final written exam that you can take at your convenience. While you’re going through the course, we recommend finding a mentor, engaging with other Pilates instructors, and following relevant social media accounts. Mainly attend as many as classes possible so that you do not miss the important part of the training. Staying active and engaged in the larger Pilates community will prepare you to launch your career as a Pilates instructor from the moment you pass your exam and receive your certification.

### 4. Purchase liability insurance.

Once you’re certified, it’s important to secure liability insurance. Commercial general liability (CGL) insurance will protect you against third-party injury claims, and professional liability insurance (PLI) will protect you against claims relating to injuries that your clients might experience while training with you. Additionally, if you’re working with a reformer or other piece of Pilates equipment, you’ll want to purchase product liability insurance, too.

### 5. Pursue continuing and supplemental education.

As a certified Pilates instructor, it’s important to get re-certified to stay up to date on your credentials. Although Pilates instruction is an unregulated industry, staying certified gives your clients, your potential employer, and your business the peace of mind that comes with knowing you are credible, reliable, and professional. Additionally, taking continuing education Pilates courses means you’ll stay current on relevant trends in the Pilates field so you can provide your clients with the best classes possible. The training for Pilates never stops, new things and exercises keeps on adding and updating as per the new trends. So, it is necessary to be a constantly updates about the course to stay in the market.

With these five steps, you’re ready to turn your love of fitness and helping others achieve their health and wellness goals into a successful career as a Pilates instructor. So, try Pilates and see for yourself if this can be one of your career choices.

Gym instructor? Regular. Dietician ? Regular. So what else can be an innovative career option related to fitness and health? Pilates instructor is the answer. Though the type of fitness exercise is not that popular, it is slowly hitting the urban areas of main cities and many people are actually trying this new practise.

*Steps to become a Pilates Instructor:*

#### 1. Decide what kind of Pilates instructor you’d like to be.

The best way to determine what kind of instructor you’d like to be, immerse yourself in as many classes as you can to learn the exercises and watch how the instructors interact with their clients. Watching other instructors is one of the best ways to determine what kind of Pilates instructor you’d like to be. Additionally, you can gauge whether you want to teach one-on-one or group classes and whether you’d like to work in a niche, such as Pilates for seniors or expectant mothers. Once you’ve taken a few classes and know how you’d like to specialize and what kind of instructor you’d like to be, it’s time to decide which type of Pilates certification you want to pursue.

#### 2. Choose the right Pilates certification program.

Once you know the type of instructor you’d like to be and the type of certification you’d like to pursue, it’s time to research specific Pilates certification programs. The right Pilates should include a robust curriculum covering these topics:

- The origins and evolution of Pilates
- The basic principles and applications of Pilates
- The anatomy and physiology principles related to Pilates
- The core stabilizing muscles used for different exercises
- Basic Pilates mat exercises for group and one-on-one settings
- How to use Pilates exercises to address overuse injuries, arthritis, postural disorders, lower back pain, and misalignment issues

## Fitness model

In today’s age of social media, Instagram models and professional models are getting huge importance. Fitness modelling is another such profession which has developed a lot due to social media attention. How can you be a fitness model? Here’s the way for the same.

Eating clean, working out daily, and having an athletic build are all key fitness model requirements. Most fitness modelling agencies look for body types that are lean and fit, with defined muscle tone. Being fairly tall—no shorter than 5’6” if you’re a woman and six feet if you’re a man—is usually standard in the industry. Many fitness models also have a healthy glow, great skin, shiny hair, and a nice smile. Agencies are always searching for fitness models with a commercial look that will appeal to a broad range of consumers, as this makes them easier to book for clients.

Landing fitness modelling jobs takes more than a good physique; having a strong fitness model portfolio and a unique look can also catch the attention of fitness model agencies, and help you book fitness modelling jobs. So, your portfolio plays a very important role. Prepare a great portfolio using the different websites.

If you want to learn how to be a model, you have to get your fitness model poses down! Posing in photographs can feel a bit unnatural at first, especially if you’re trying to highlight your muscles or build. Don’t be afraid to try a few different poses so you can feel confident in front of the camera and create great shots for your fitness model portfolio. Look at the top fitness models on Instagram and other social media to get a sense of how they pose and frame their shots. Fitness photographers have the training and expertise to make fitness models look good. Go for a fitness model photographer

who has proven experience photographing fitness models and athletes. After making a great portfolio, send it to fitness modelling agencies who you think will give you the desired job. Also participate in many fitness modelling competitions. Many fitness models will participate in swimsuit competitions and fitness pageants to show off their body and get the attention of fitness modelling scouts.

So, if you are a gym or fitness enthusiast and love modelling, this is the career for you.



# insight

## FAERIE TALES

कभी किसी पन्ने पे, मिलना यूँही म्याही की बूँदों में,  
कुछ लग्न बया हो, कुछ शिकने सही,  
तुम अपनी आयबीती कहना, हम अपना दर्द बाट लेंगे,  
उस किताब में तुम्हारी कहानी के साथ, शावर मेरा बचपन भी मुझे वापिस मिल जाए...

Stories have always been an integral part of our childhood! They were a sleep ritual for some of us, while for others they were the reason to bond with the older generations. And why wouldn't they be! The characters, the scene, the plot, everything fascinated us and took our naive imagination to far away lands of Fantasy and Wonder, from where we never wished to come back to our boring real world. Right from the mythological stories of Ramayan, Maharabharat, Greek mythology to the Fairytale of Cinderella, Snow White, Rapunzel, Little Red Riding Hood, etc upto the magical

tales of Arabian Nights! These have been the fondest childhood memories, which one could revisit time and again without feeling even a speck of boredom.

But somewhere, sometime you might have felt that, these childhood stories are 'too good to be true'. Well, they really are. Infact, our innocent curious minds were never told the true stories behind them, to protect us from the harsh realities of life, and the unknown side of this Fantasy Land is much darker than we could've imagined. Blame it on Disney, but these stories, are much more 'Grimm' than the brothers told us...

- SARA CHAVAN (TYBA)

## AND THEREBY HANGS A TALE

(somewhere in the castle, there is a girl forgotten)

so the princess sleeps. in her mind the forest grows, the sweet smell of the pine-trees cloying till it stings, sinking into her bones like a lure, like the sound of birdsong echoing deep in the woods. there, is the river, flowing half-dazed—a splinter in the unsettling quiet that balances itself on the overgrown path. still, the princess sleeps, oblivious and pitiful at the feet of ancient trees, their roots crawling under her body like a makeshift grave. the tendrils that reach her do not caress her cheeks softly—instead, they sink their claws in mercilessly, creepers surrounding her shrouded body like spider webs, entangling their helpless prey—trapped in this lair, waiting for a king who has never learnt how to ask.

(but where are the fairies? where is the witch? how long has it been? how long will it be?)

so the children read. once upon a time, their stories were ones that slithered away from the light, breathing in the crooks and corners, crawling their way through the grimy darkness, wrapping their fearful tendrils around gullible hearts like a warning. the woods, the witches and the kings who only knew how to take, lying in wait for innocent souls stumbling across their path—children of grim, abandoned under the moonlight, prey to the dark forces that grow in human hearts, cursed and lonely in the hands of adults all too eager to pry their innocence. so the fairy tales were told, stories of caution to the wanderers and the naive, metaphors for how much the world is willing to take away from a heart that trusts too easy.

(but just who are the monsters, the dragons or the princes who slay them?)

so when, in time, do we learn to unmake a tale? when do we start to unmake a girl in the woods somewhere, forgetting her sunken cheeks and bleeding palms and the way eternity grows in her lungs and make her something beautiful ? when do we make heroes out of the men who stand above her, the kings who only know how to conquer, be it a castle or a girl's body frozen in time? does time soften the cruelty that thrives between the lines? is that what it is like to view a fairy tale through rose-tinted glasses? till all the beasts become people become princes become love become kisses become princesses awakened become faded pages forgotten unmarred untorn undone—

till the stories become aches that are only a ghost of the wounds they once were.

- ANUSHKA NAGARMATH (SYBA)

## SOME PEOPLE ARE BORN WITH TRAGEDY IN THEIR BLOOD

What comes to your mind when you think of Greek Mythology? Adventure and glory and joy. Oceans sailed and dragons defeated and new loves found. We think of untouchable heroes standing with their heads held high and swords brandished and shields ready, to defend the defenseless. But that's not what Greek mythology is. Greek myths are stories of humanity, of all too human despair fear and greed and sorrow, of gods who were no longer kind or merciful.

Gods who slaughter entire cities for a slight. Who will take and take and take from you and then still be hungry for more. They will claw out what you hold dear from where it is cradled in your hands and call it a tribute to them. Greek myths are warnings. Name one hero who was happy.

You can't.

When you think of Achilles, do not think of glory. Do not think of being burned in memory for a thousand years. Do not think of honor. Think instead of love spilling out into sand through the veins of your most beloved. Think of a grief so harsh that the world tumbled over its axis and could not right itself. Think of a God guiding an arrow through Achilles' heart. Think of pride and its fallings.

When you think of Ariadne, do not think of an adventure. Do not think of laughing in the passenger seat of a getaway car, wind flowing through your hair, and sirens lilting into melody amongst your laughter. Of the thrill of leaving everything you know behind. Instead, remember that some loves are not worth dying for. Keep your thread to yourself, darling. Don't help the monsters escape. Do not let Orpheus and Eurydice remind you of an undying love. A love that will follow you into hell and lead you out. Remember instead that the Gods are unkind. That they will not allow you to walk out of this bargain having won it. Remember Herakles who completed every impossible task assigned to him and still lost his family.

Think of Circe, exiled and lost. Agamemnon mourning his daughter. Aegeus flinging himself off the castle turrets. Remember there are no happy endings here. Name one hero who was happy.

You can't.

- LAKSHMI KALARIKKAL (SYJC)

## THE STORY OF THE STORY

"Beware of the stories you read or tell; subtly, at night, beneath the waters of consciousness, they are altering your world."  
- Ben Okri

Perspectives and perceptions can differ as you move across individuals, as you move across boundaries of places and times. The way I look at the same world can be so different from how you do. But every perspective is important for every new perspective generated is a new discovery, is a new purpose defined. Each perspective comes from its own background and context which sheds light to some of the answers to our whys and how's.

The point is we can have as many perceptions to one thing, idea, person, scene, story as many as there are perceivers. Probably evidential are the sheer amount of stories that exist to tell different narratives, to tell different viewpoints, to tell the same story differently.

Have a look at the mythology book shelf in a library and you'll probably find the same Mahabharata told from ten different characters as those of Duryodhan, Arjun, Draupadi or even Dhritarashtra and their moral dilemmas and their reasons. Look at the contemporary shelves and you'll find a simultaneous narrative of the male and female protagonist chapter by chapter which will be starkly different about the same scene. Look for that book which has just published its contemporary which is told from the other character's perspective who was once only in the second or third person and who has now some hidden sides to reveal. Each object of a narrative becomes the subject, the narrator and tells his version of the world.

And the point here is how do you want to take it? Stories allow for the freedom of imagination and for the freedom of interpretation. The give and take is so subtle yet so impactful. And that freedom will come with responsibilities. An onus borne not only by the storyteller but theirs and their reader's back story of it. Even there lies a narration untold, unwritten, never shared, only felt.

Perhaps, even unbeknownst to them.





# OP ED

## CONSUMERISM AND ENVIRONMENT

With changing times, there has been an over saturated market for a variety of products and services that corporations provide to the society. This has led to an increasing competition among companies which lead to them resorting to newer and newer strategies and products to draw a consumer towards them and keep their profits intact. Hence there are too many products in the market and just as many consumers buying these products only to forget the old ones. In this rat race our planet has suffered greatly owing to improper waste management and unethical industrial practices. In this edition of Op-Ed, we shed light on how consumerism has damaged the environment by constant grooming of the consumer class to keep buying goods. Additionally, we also explore the effect politics has had on the coverage of environmental calamities and also their inefficiency to handle climate issues.

## EFFECTS OF CONSUMERISM ON THE ENVIRONMENT

As the demand for goods increases, the need to produce these goods also increases. Only 5% of the world's population falls under the efficient consumer class yet they utilize more than 30% of the natural resources. Since industrialization, we have become a consumer driven economy and a material driven society and people began to consume in mass, leading to high demand and thus, over extraction of raw resources. The established consumer's cycle, i.e. EXTRACTION, PRODUCTION, DISTRIBUTION, CONSUMPTION and lastly, DISPOSAL, increased its pace of occurrence that instead of preserving the goods for a long period of time, people simply buy new ones.

Not only are we brainwashed by the advertisements and companies' various ways of promotion, but also from the crucial reality behind making these products, i.e. the harm caused to the environment. It begins with extraction of resources and landscaping of industrial farmlands; resulting in more pollutant emissions, increased land-use and deforestation, and accelerated climate change.

We are experiencing devastating effects on the planet's water supplies, as more and more water stores are used up or diverted as a part of intensive farming procedures. For e.g. It takes 20,000 litres of water to farm 2 pounds of cotton, and none of us feels guilty about throwing away a dozen of clothes which we apparently don't like anymore.

Waste disposal, the last stage, is becoming a problem worldwide, and our oceans are slowly but surely becoming a giant waste disposal pit. It is estimated that over half of the plastic produced every year is single use – this means that it is used once, and then either thrown into landfill or finds its way into the environment.

According to scientists, up to 12 million tons of plastic enters the ocean every year, forming giant floating garbage patches all over the world. A huge portion of the waste being plastic that is generated from the 'Use and Throw' culture that has been developed worldwide by huge corporations by lowering the costs and citing greater utility. These corporations sell their products and incur huge profits without being held accountable for the waste management during production or after these products are discarded. By extension they aren't held accountable for the effects they have on the environment.

The culture of social media has also contributed significantly to environment degradation. While the link might not be immediately apparent it is definitely there. Social media connects the world and is what sets the benchmark for something that is 'cool' or 'hip', basically a place where people who keep up with the trends thrive and flourish. This benefits the companies that take a page from social media to adapt with the trends. Consumers flock to the stores that sell the trendiest products under the impression that they need to have the latest items in the market, in the process haphazardly disposing the perfectly good commodities that become 'out dated'.

If every human on the planet lived the way an average American lives, we would need three Earths to sustain our lifestyles. The need to recognise the effects of consumerism on the environment becomes more important than ever, what with the need to catch up with climate change has presented us with a time bomb that refuses to stop ticking.

As consumers making smart choices for while making purchases is our responsibility that needs to be taken seriously.

- Mithila Kudalkar (SYJC)  
Shabduli Shinde (TYBSc)

## EFFECT OF POLITICS ON THE ENVIRONMENT

Being the largest democracy in the world, India has to tackle all the problems that are present at the different levels within the government. Mistakes made by any rung of the government can contribute to dismantle the entire structure and reputation of the party in power. One of the most important issues at hand is the climate change and other environmental hazards that are caused as its by product.

India is a vast country, hence, it is at times hard for the central government to provide equal attention to each and every region under it. This kind of neglect can at times lead to problems, especially in calamity prone areas. A good example for the same is the Assam flood which didn't get as much attention as a day of heavy rainfall in Mumbai gets due to various reasons, like the lack of proximity from the capital and can lead to development of a negative feeling of isolation or alienation among the slightly neglected regions. What matters the most is that due to such situations the local people get affected and even their simple demands of replenishment aren't fulfilled.

Debates and discussions are an essential part of the Indian political system and can help the state from making dire mistakes like the protest against the building of Sardar Sarovar dam on river Narmada and displacing the local tribal populations of the area by Medha Patkar. But, we also see instances where the government doesn't understand the importance of sustainable development and equates development to building of concrete jungles on forest patches. The state government's decision of building a car shed for the metro by demolishing the Aarey Colony's forest which houses a great variety of endangered and rare plants is a step against the protection of the ecosystem in India.

It is sad to say but the truth is that the parliaments in the last few decades have been filled with elderly and biased politicians who at times come up with random and nonsensical arguments to prove their point. Recently, a dam in Maharashtra called Tiware collapsed and when the officials responsible for the caretaking of the dam were asked for the probable cause of the collapse, they said that emergence of crabs during the monsoon is the cause.

All these discussions boil down to single solution that if we want to take care of our environment on a broader scale we will have to vote wisely and cautiously.

- Disha Shanbhag  
(SYBA)

## STEPS BEING TAKEN FOR ENVIRONMENTAL CONSERVATION

With rising awareness among the population worldwide regarding climate change and environmental degradation, movements for environmental conservation have gained prominence and have been steadily on the rise, making their voices heard. Thanks to these movements big corporations have started to take heed and are implementing changes to reduce environmental damage. Starbucks aims to stop using plastic straws in all its outlets worldwide by 2020. Some alternatives to plastic have been reusable metal straws. Some outlets also have sippy cups that do not require any straws at all. Many small businesses have followed the example and have started using paper straws instead.

A lot of states in India including Maharashtra, Tamil Nadu, Himachal Pradesh and Uttarakhand have banned the use of plastic bags entirely. This move received a whole hearted response with retailers as well as consumers opting for paper and cloth-based alternatives.

## HERE'S WHAT YOU CAN DO TO SAVE YOUR PLANET:

Reuse and recycle as many products as you can. Reduce buying items unnecessarily to reduce the waste being generated. Donate items to charities when upgrading to better models to ensure the haphazard dumping of items.

Buy from local and environment friendly businesses to ensure that they use good environmental practices during production.

Segregate organic biodegradable waste and plastic, metal and rubber waste that can be recycled at home itself.

- Shabduli Shinde  
(TYBSc)



# Open Forum

## Smooth Operator: On VK Krishna Menon

The year was 1952 and the Korean War was raging. China had entered the fight, no ceasefire was in sight, and the UN was sharply divided. Working together against the clock to find a compromise amenable to both the US and the Communists were the delegations of Britain, Canada, and India, led by VK Krishna Menon. After a year of tortuous deliberations and much diplomatic maneuvering, the war was concluded on the back of a resolution substantially identical to Menon's. India had punched above its weight and showed the world how it would practise its policy of nonalignment. Seven years later, this seasoned diplomat – now defence minister – was involved in a most undiplomatic row with Chief of Army Staff General Thimayya.

They sparred over armaments (Menon was not willing to purchase arms from Belgium, a NATO country) and the appointment of BM Kaul to lieutenant general (Thimayya noted that Kaul had little combat experience and twelve officers were senior to him).

When the inevitable Sino-Indian War came at last in 1962, India was humiliated, Thimayya was vindicated, and Menon, in disgrace, resigned.

### Who, then, was Krishna Menon? -

Menon was born on 3 May 1896 in Kerala into a fabulously wealthy family of eight children. His father Komath Krishna was a well-heeled lawyer and his mother was descended from the Dewan of Travancore. He was something of a disappointment in early youth – he “was busy being sensitive and gentle, insisting on feeding his pony milk and oats from the breakfast table”.

He acquired a BA in History and Economics from Presidency College, Chennai. He came under the influence of Annie Besant and the Theosophists, a curious religious movement linked with the cause of Home Rule. He was hot-headed and active in debate societies. Reputedly, he flew the Home League flag on his college's mast, nearly getting himself expelled.

Menon decided to earn a diploma in education in London in 1924, much to the dismay of his father, who wanted him to succeed him in the legal business. Dreams of teaching soon vanished, as did his Theosophical leanings. While he did gain his teaching diploma, he also studied psychology at University College, London and then political science at the London School of Economics, graduating with master's degrees in both. He was admitted to the Bar in 1934. He had joined Annie Besant's Home Rule for India League on his arrival in 1924. By 1928, Menon was joint secretary of the organization and had transformed it into the India League, with the objective not of dominion status but of complete independence. The India League would become known as the “sister organization of the Congress” in the UK: organizing rallies, lobbying British MPs to speak for their cause, and commemorating “Independence Day” and the Jallianwala Bagh massacre, for example.

Menon also found time to found Penguin Books with Sir Allen Lane, editing the nonfiction Pelican Imprint. Not long after he made a far more important acquaintance: Jawaharlal Nehru.

Nehru was undeniably fond of Menon. The Swedish ambassador to India, Alva Myrdal, explained: “Nehru knew Menon's shortcomings but kept listening to him because of his brilliance.”

Already he was considered suspicious by MI5 for his pro-communist leanings. “He was a frequent visitor to the offices of the Communist Party in London's King Street and he was often on the phone to Communist leaders,” says Outlook. His phone calls were intercepted, and his correspondence was infiltrated. Released MI5 documents describe him as “a sick man whose relations with his fellows could never be normal or happy”. They record his use of recreational drugs and his love affairs – which were many, one of them plunging him into a long depression. His anti-imperialism did not help; he once compared British rule and Nazi domination as a choice between “being fried in butter or margarine”

MI5's consternation would only grow after 1947, when Nehru appointed Menon India's first High Commissioner to the UK. Far more annoyed were the Americans.

“He is not only an unpleasant mischief maker, but also, because he is such a smooth operator, dangerously persuasive.” Britain withheld classified documents from Menon and hinted that he had to go. However, Nehru stuck by his friend, even when he discovered that “Menon had the appearance of a person on the verge of going off his head...”

He was eventually recalled in 1952 and made a Cabinet minister without portfolio. He represented India and Nehru at the UN to the dismay of the US. While he was one of the architects of nonalignment, Menon refused to condemn the Soviet suppression of the Hungarian Revolution in 1956, which cost India its reputation in the West. He is perhaps most notable for his eight-hour speech in the UNSC defending India's position on Kashmir; he was hospitalised towards the end of it but returned to speak another hour.

After his resignation as defence minister, he spent his life giving speeches and arguing cases in the Supreme Court. On his death in 1974, Indira Gandhi remarked, “A volcano is extinct.” But perhaps more relevant is his own assessment of himself: “I was neither a buffoon nor a Rasputin.”

**Aditya Negi**

## Storm Meme Culture

# How to Confuse A Government

Ah, the fabled Area 51. One of the most highly classified U.S Air Force bases located in Nevada, and arguably the most unique in the aspect that it is one of the few military installations with a fan following. Indeed, Area 51, officially called Groom Lake or Homey Airport, has gained extensive notoriety due to the extreme levels of secrecy the U.S government likes to maintain about that base and its contents. The common belief since the 1950s is that Area 51 holds definitive proof of extraterrestrial life, and many people have tried and failed to extract evidence about its operations. Eventually, the fable of Area 51 lost interest for bounty hunters and UFOlogists (I swear, this is actually a term) and, upon passing into the Internet age, went the way of many such popular subjects: it became a meme. Memes about Area 51 and aliens have certainly been around for a long time, and the Storm Area 51: They Can't Stop All of Us event posted on Facebook on June 27th, 2019 was also intended to be a simple gag. However, as it often goes with the Internet, the episode unexpectedly went viral, and over 1.5 million people discovered the page. Jest's and fun-filled discussions about how they would break into the facility and what they would find spread across the world. Just another chapter in the long haul of meme amusement - except this time, it actually garnered some unexpected attention too. On July 10th, the U.S Air Force issued an official warning reminding everyone that Area 51 is legally restricted and trespassers would be prosecuted and quite possibly shot. The Internet has never been the place to look for cowards; hiding behind screens bolsters confidence, and the statement was followed by wild speculation about the implication that the administration might actually be hiding something big from the public. The event creator has stated that he intended the entire thing to be a joke, and he is not responsible for any people that actually decide to turn up to Area 51 on September 20. The curious cat inside me is dying to know what lies inside the depths of Area 51, but it appears we are not to find out any time soon. We have our imaginations to hold us off till the chain-link fences fall and reveal the truth - that ducks were aliens all along. (Yes, that's an actual theory. Have you seen how mean they can be?)

**Natasha Desai**

We are witnessing the next great space race. But this time, it's not the US vs. USSR. This race is between Elon Musk and Jeff Bezos.

The aerospace industry has always been driven by competition. In 1927, Charles Lindberg competed against eight other teams to achieve the first non-stop transatlantic flight to win the \$25,000 Orteig Prize. In the 1960s, it was America versus the Soviet Union that resulted in Sputnik, Yuri Gagarin, and Apollo 11. Fast forward another 40 years, and in 2004 the \$10 million Ansari XPRIZE sparked the commercial space industry.

Now in 2019, on the brink of the 50th anniversary of Apollo 11, the competition that will rocket humanity into the cosmos is between two passionate and brilliant multi-billionaires: Jeff Bezos and Elon Musk. Both, Bezos and Musk are driven by their passion and belief that humanity's ultimate future requires our expansion into space. Both are developing privately funded, reusable, human-carrying vehicles, and both, in the near term, are heading towards the moon.

Beyond those similarities, Musk is heading towards the surface of Mars, and Bezos is heading towards the construction of large-scale space colonies. One thing is for sure: regardless of who succeeds, everything humanity has ever held of value on Earth metals, minerals, energy, real estate etc are in near infinite quantities in space, and the greatest wealth ever anticipated will result as humanity reaches towards the stars.

Thanks to pioneers like Elon Musk and Jeff Bezos, we are on the verge of accessing this infinite cache of materials and energy for the continued expansion of humanity, and our progress towards increasing abundance. As a result, we are about to see the greatest economic boom in human history, leading to a period of prosperity beyond our comprehension.

**Shwetal Funde**





# TECH TRICKED

## WHY ARE THERE MORE THAN ONE CAMERA LENSES ON YOUR SMARTPHONE?!

We have arrived at the middle of the monsoon season this year, and monsoon does bring the serenity with it. Landscapes all around are somehow rejuvenated. I admit that most of us while being close to nature, just tend to whip out smartphones, launch the camera and start shooting!! There was a time when we would use our feature phone's camera having a resolution of about 1 or 2 megapixels. To say the least, most of the photos taken then were like the content is censored. But to our joy, we can say that those days are long behind us. The only thing that makes us disappointed these days is the accidental opening of selfie cameras! To make all the mobile photographers out there familiar with their mobile's camera module and also for all the curious minds out there, who like to feed on new information from time to time and love asking unusual questions, I am going to give a brief on why the smartphone companies have started integrating more than one camera in their devices.

Camera performance is one of the deal breakers these days for users and for that reason manufacturers add features to improve image quality. However, users also want thin phones, which greatly limits the size of the individual camera modules that can be used. For this, there is a term called 'Z height' which is nothing but the thickness of the phone. To keep Z height small manufacturers started increasing the length and the width of the phone, which is one of the reasons your phone can't be used single handed anymore. But the additional camera has made a number of new features possible, like zoom, better HDR(High Dynamic Range), 3D photography, low light photography etc. But when you try to do something innovative, it also comes with it's fair share of challenges to be overcome. We will now see in depth how each feature adds to the photography experience and how the challenges to provide this experience are handled by the designers of the devices.

### TELEPHOTO LENS:

Until the first half of 2013 the zoom capabilities of a device were digital i.e photos were cropped or resized post capture to add the illusion of zooming-in. Then some devices started adding optical zoom. But this was possible just because the devices were pretty bulky. The physics of lens design make it very complex to fit a zoom lens into the thin body of a high-end smartphone. So over the last two years, almost all flagship phones have moved to a dual-lens-and-sensor design for their rear-facing camera. The prominent feature a dedicated telephoto camera adds is that it enables the user to capture good quality photos at long focal lengths. At the native focal length of the telephoto camera, the camera uses a typical pipeline to process and render the image at the sensor's native resolution. This provides a better result than cropping and scaling the image from the main camera. Images from the two camera modules can be blended to create improved results even at non-native focal lengths, but this presents some unique image processing challenges. As we have seen earlier it is difficult to add a zoom lens within the thickness of the phone, the longer focal lengths of telephoto lenses require a combination of clever lens design and smaller sensors to fit. 'Folded optics' is a way to overcome the focal length limit that the phone's thickness restricts. The camera module sensor is placed vertically within the phone and aimed at a lens with an optical axis that runs along the body of the phone. A mirror or prism is placed at the correct angle to reflect light from the scene into the lens and sensor.

### WIDE-ANGLE LENS:

LG was the prominent company who pioneered this type of camera module by adding a second wide angle lens in their devices in 2016, it was called 'ultra-wide' camera. More recently, LG and Huawei have shipped models featuring a triple rear camera that includes traditional, telephoto, and ultra-wide lenses. The ultra wide camera has a larger degree of field vision than the standard camera, which lets the user capture photos of wide landscapes.



### PORTRAIT MODE/ DEPTH EFFECT/ BOKEH:

As we have seen earlier a telephoto lens has longer focal length because of the optics involved. This property when used in capturing portraits gives image much more clarity by removing distortions. By having two slightly offset cameras, it is also possible for the phone to estimate the depth of objects in the scene. This process starts by measuring how far apart objects are in the images from the two cameras—an effect called 'parallax'. Objects close to the cameras will be quite far apart in the two images, while objects further away will appear much closer together. Adding the ability to estimate the depth of objects in a scene allowed the introduction of specialized portrait modes in multi-camera phones to keep the subject sharp, while giving the background a pleasing blur. Standalone cameras with wide-aperture lenses automatically do this because of how the optics work. But the smaller smartphone sensors require in-camera post-processing of the images to achieve a similar effect. There are a ton of challenges which manufacturers have to overcome, when it comes to giving a background blur. As there are two cameras involved it is hard to make them work in a synchronized manner. It can also create problems while capturing an image as the two cameras always have different perspectives and removal of parallax actually requires much more computational power than a smartphone may be able to provide. While having two complete cameras may be the best way of achieving these effects in a smartphone, it isn't the only way. Google's Pixel 2 and Pixel 3 phones, for example, use the dual pixels on their sensors to read images from both the left and the right halves of its pixels separately, essentially creating two virtual cameras that are slightly offset. The image created from the left side of the pixels is shifted by a mere millimeter in perspective from the right, but that is enough for Google to use the differences between the two of them as an initial estimate of depth. The phones then combine a burst of images with some clever AI to generate a more accurate depth map and then to finally blur the background.

At this point in time, there have also been some tries at 4 cameras at the back of a phone and there have also been renders and rumors about many upcoming phones shipping with 4 or more cameras. But as we have discussed earlier multiple cameras do come with their fair share of challenges and they increase as the number of cameras in a module increases. But the rapid advancements in software and hardware make it possible for smaller cameras to do work more efficiently than a single big camera. More finer quality and upscaling of resolution is always going to be on the horizon until some drastic breakthrough happens in the field of optics or digital processing. So always be on the lookout for anything and everything new.





# Science of Everything

## MAGNIFICENT MOON

What adorns the night sky with its brightness? Yes, it's our magnificent moon. The moon has always been fascinating to us. In a month we can observe different phases of the moon - new moon, first quarter moon, full moon and last quarter moon. Full moon is when we see a bright, beautiful sphere of moon in the sky. But did you know that there are a few unusual types of full moon? Let's have a look at them. On one of the full moons, if the moon seems larger and brighter than usual to your eyes, there is nothing wrong with them - it's a supermoon! A supermoon occurs when the full moon is at its closest distance to the Earth. During a supermoon, the moon appears 14% larger and 30% brighter than a regular full moon. We know that the moon revolves around the Earth not in a circular orbit, but in an elliptical one because of the gravitational pull of the Sun. The elliptical orbit brings the moon closer to and farther from the Earth as it

goes around. The farthest point in the ellipse is called apogee and the closest is called perigee. When the full moon occurs at perigee, it leads to the super moon. On an average, supermoons only appear once every 14 months. There is a misconception about supermoons saying they can lead to tsunamis and floods. Supermoons do have an effect on tides - but they only vary upto 2 inches (5 cm) more than regular tides, which is not a significant change.



SUPER MOON ( In article Magnificent Moon )

When you see a striking view of a red or muddy brown colored moon in the sky, it is the 'Blood Moon'. A "blood moon" happens when Earth's moon is in a total lunar eclipse. The moon takes about 27 days to orbit Earth and goes through regular phases in a 29.5-day cycle. Lunar eclipses can only happen during a full moon, when the sun fully illuminates the surface. Usually a full moon has no eclipse because the moon orbits in a slightly different plane than the Earth and the sun do. However, at times the planes coincide. The Earth passes in between the moon and the sun and cuts off the sunlight, causing an eclipse. If Earth partially blocks the sun, and the darkest part of its shadow falls across the moon's surface, it is called a partial eclipse. You will see a black shadow taking a bite out of the moon. But during a total lunar eclipse, the Earth totally blocks the sun, and the only light coming towards the moon is from the edges of Earth's atmosphere. The air molecules

in Earth's atmosphere scatter out the blue light, and the remaining light reflects onto the Moon's surface giving it a red glow. It has no astronomical significance, but the view of the red moon in the sky is spectacular.



Blood moon

You have heard people say 'Once in a blue moon', which means something rare. Yes, a blue moon occurs once in two and a half years. In recent years, people have been using the name Blue Moon for two different sorts of moons: the second of two full moons in a calendar month, or the third of four full moons in a single season. As the seasons last for almost three months, there should be three full moons ideally, but if it happens that there are four full moons in a season then the third full moon is called a seasonal blue moon. By definition, blue moon is the second full moon of the calendar year, it is called

Monthly Blue moon. Hence the 'blue moon' is not necessarily blue in colour. Very rarely, a seasonal blue moon and a monthly blue moon can occur in the same calendar year.

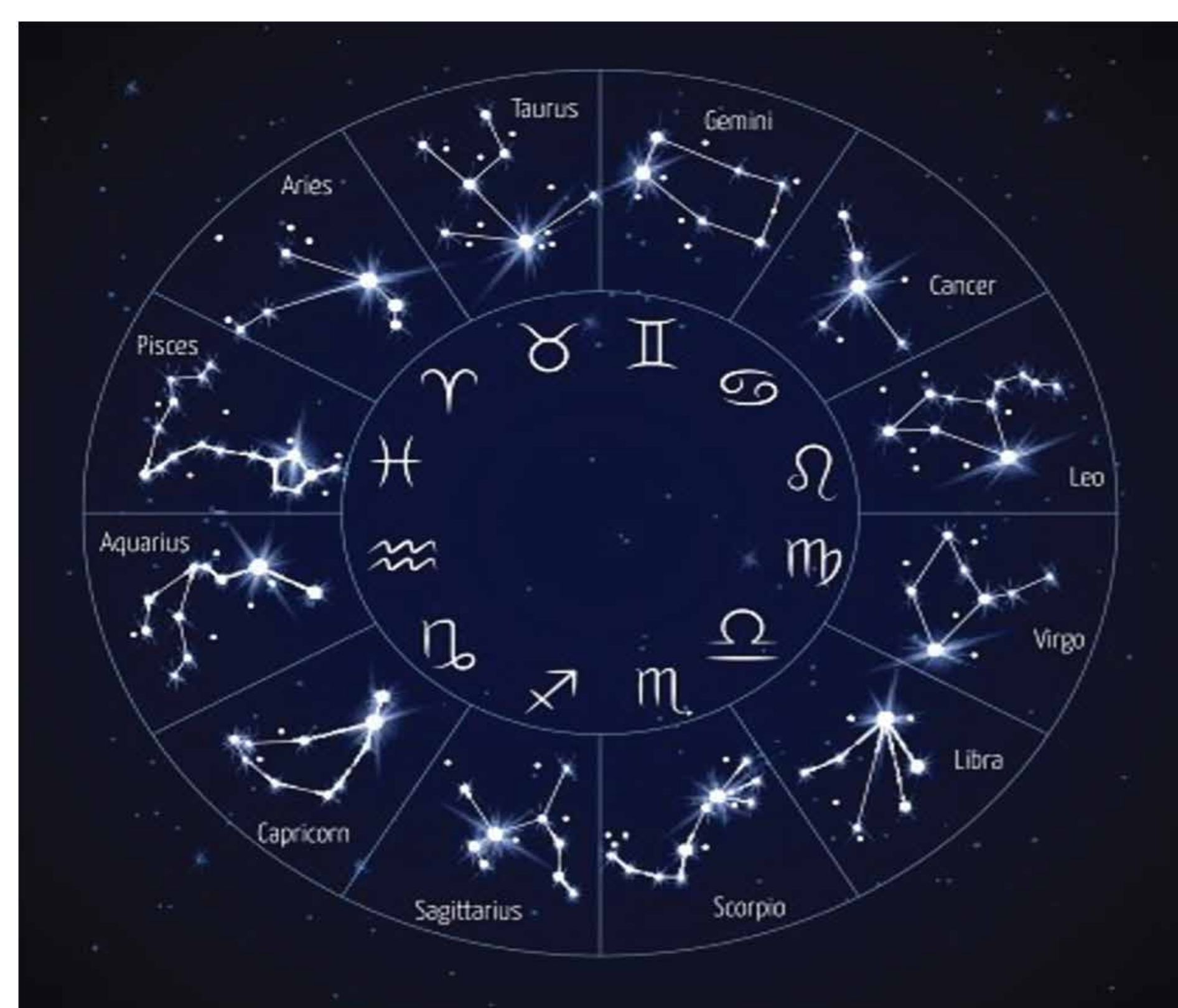
Thus Earth's natural satellite, that is our moon undergoes these fascinating changes and never fails to awe us.

- Sanika Upadhye, TYBSc Bioanalytical

## WHAT SIGNS ARE THE MOON AND THE SUN ?

We're surrounded by stars, but some are more special to us than others. In our April edition we saw constellations; now let's learn more about our sun and moon signs.

1. The zodiac is an area of the sky that extends approximately 8° north or south (as measured in celestial latitude) of the ecliptic, the apparent path of the Sun across the celestial sphere over the course of the year. The paths of the Moon and visible planets are also within the belt of the zodiac.
2. The zodiac is divided into twelve signs, each occupying 30° of celestial longitude and roughly corresponding to the constellations. These zodiac signs are an abstraction from the physical constellations.
3. In simpler words, a year is divided into 12 equal parts, and Sun and/or the Moon resides in a constellation for a specific time period before moving onto another, hereby forming a corresponding zodiac sign for that period.
4. Your Sun sign is easy to determine, through your day and birth month. The Sun sign is the Sign of the Zodiac where the Sun was situated at the moment of a person's birth. It is easy to determine as the Sun stays longer in a
5. The Moon moves quickly around the zodiac, taking one month to visit all signs and stays in each sign an approximate two-day period; hence, your Moon sign can be determined by a calculation of your full date, place and time of birth.
6. Where you are born has an impact on what is seen in the sky, and this has a major influence in determining your moon sign since planetary placements would differ.
7. In astrology, your Sun sign dictates your zodiac personality, while your Moon sign, represents your emotions, your inner mood. And the two together strongly influence your emotional mode of operation.



Thus, going through your daily horoscope can be a fun way to learn about who you are and imagine what the future holds. But there's more to astrology than just reading your daily horoscope.

-Prajakta Velankar TYBSc Bioanalytical Sciences

## SWAYED BY THE MOON

This month we are going to see some strange facts about the moon that may surprise you:

1. **There's actually four kinds of lunar months.** Our months correspond approximately to the length of time it takes our natural satellite to go through a full cycle of phases. But there are actually four different kinds of lunar months. 1. Anomalistic 2. Nodical 3. Sidereal 4. Synodical
2. **We see slightly more than half of the moon from Earth.** We actually get to see more of it over the course of its elliptical orbit: 59 percent.
3. **It would take hundreds of thousands of moons to equal the brightness of the Sun.** The full moon shines with a magnitude of -12.7, but the sun is 14 magnitudes brighter, at -26.7. So that's how many full moons you would need to equal the brightness of the sun.
4. **A 95-percent illuminated moon appears half as bright as a full moon** Believe it or not, the moon is half as bright as a full moon about 2.4 days before and after a full moon.
5. **The Earth, seen from the moon, also goes through phases.** However, they are opposite to the lunar phases that we see from the Earth. It's a full Earth when it's a new moon for us and so on.
6. **Eclipses are reversed when viewing from the moon.** An eclipse of the moon for us is an eclipse of the sun from the moon.
7. **The moon encompasses a huge temperature range.** The temperature at the lunar equator ranges from an extremely low minus 173 degrees C at night to a very high 127 degrees C in the daytime. During a lunar eclipse, as the moon moves into the Earth's shadow, the surface temperature can plunge about 500 degrees F (300 degrees C) in less than 90 minutes.
8. **The moon has its own time zone.** Kenneth L. Franklin, designed a watch for moonwalkers that measures time in what he called "lunations," the period it takes the moon to rotate and revolve around the Earth; each lunation is exactly 29.530589 Earth days.

- Neha Raut , TYBSc Bioanalytical





## Tour Circuits

### Why travel one at a time?

I am crazy behind passports and the whole concept of stamps. My passport is my personal travel diary, the one you always visit for a pinch of nostalgia. My goal on every trip is to get as many stamps as possible on my passport. And let's be honest who wouldn't like different locations on every Instagram picture. Whenever I plan a trip, I always visit travel companies websites, like ThomasCook, Kesari, etc. Because these companies always sell travel packages including at least 3 different locations. I here, am not recommending to buy those packages but to browse through them because these companies are smart planners. People generally get attracted to quantity and who wouldn't want to visit many countries at one go. If you haven't already noticed these packages offer those countries in a package which are nearby and share an option of cheap commute between one another. There are a few packages I handpicked myself -

#### Cruise:

This May, I had been to Singapore for a family vacation and we planned our trip in such a way, that we ended up visiting 3 different countries. After spending some days in Singapore, we boarded the Royal Caribbean Cruise (Voyager of the Seas) and this Cruise took us to Indonesia and Thailand both, where we spent a whole day, while our cruise awaited us. This was just an example, but there are wide ranges of Cruises offering different packages for you to explore.



#### Europe:

There are a lot of different options to choose from when it comes to Europe. I couldn't help but club the European countries under one roof because they all have an option of cheap commute, that a backpacker could easily afford (trains, buses, etc.) These are destinations one could easily club like,

PARIS- BRUSSELS - AMSTERDAM - ZURICH - PRAGUE - ROME - VENICE - LONDON

There are a lot of countries for you to explore, why travel one at a time? - Rashi Gulati

#### AFRICA:

Africa gets a lot of negative publicity in media. Words like diseases, terrorism, poverty, and wilderness are often used while describing Africa. But these words do not define Africa. While Africa is facing a lot of challenges, not every African nation is in crisis. Countries like Ghana, Namibia, Tanzania, Malawi, etc. are safer than the United States. Travelling in Africa is not all about wildlife safaris. Tanzania, Mauritius, Seychelles, South Africa are few of many countries with excellent beaches. It hosts adventure activities like Shark Diving in South Africa, Bungee Jumping at Victoria Falls, River Rafting in Uganda and Ethiopia, Surfing in Senegal, Sandboarding in Namibia, Snorkeling in Madagascar and Skiing in Morocco. Many cuisines of Africa are among the finest in the World. Africa is full of cultural diversity and you'll have the best experience spending time among the tribal people and getting acquainted with their traditions.

#### African Circuits:

#### Mauritius - Seychelles - Madagascar

Starting with Mauritius, enjoy parasailing in Aux Cerfs. Visit Valley of Colours to see the 23 coloured earth and to do Quad Biking. Moving to Seychelles, see the unique Coco Du Mer palm trees of Vallee du Mai National Park. Also savour the secluded beaches of La Digue. Proceeding to Madagascar, trek to wallow in the Tritriva Lake in Antsirabe which has Shakespearian-like origin.



#### Egypt - Jordan

Learn about Egyptian history and civilization from the Egyptian Museum, stand next to the ancient pyramids that would dwarf you, sail along the longest river Nile. Explore the Pharaonic architecture at the Temples of Karnak. Imagine the Roman times from the ruins of the Jerash in Jordan (Asia). Be amazed by the glorious rock cut architecture of Petra and visit the caves which form one of the Seven Wonders of the World.



#### South Africa - Zimbabwe

View the African penguins at Boulders beach. Witness Cape Fur Seals in their natural habitat. Enjoy Casinos and Safari Game Drive in Sun City. Spot wild animals from the Cruise while sailing along the Zambezi River in Victoria Falls.



#### Kenya - Rwanda - Uganda

Learn about the sad history of mass execution at Genocide Memorial in Rwanda. Trek to see closely the endangered mountain gorillas in the Bwindi Impenetrable Forest of Uganda. You can buy amazing souvenirs at the equator with one foot in Southern and the other foot in the Northern Hemisphere. Explore the National Parks of Kenya on Bicycle and walk beside wildlife such as giraffe, zebra, gazelle and warthogs to mention a few. Witness the annual Great Migration of Wildebeest while canny crocodiles lie in wait. Visit a local Masai village, learning about the vibrant, semi-nomadic herders' way of life and join them in a local dance.



#### Zambia - Botswana - Namibia

Enjoy canoeing or kayaking at Livingstone in Zambia. Chobe National Park is home to the most diverse wildlife in Botswana. You can experience staying at Elephant Sands where huge amount of wildlife roams free, especially elephants. Also enjoy a cocktail or two in the Elephant Sands bar. Travel by hand-crafted mokoros (small boats) through the Okavango delta. Etosha National Park in Namibia has most fantastic wildlife-spotting opportunities. Etosha's vast salt pan is covered by massive flocks of pelicans, flamingoes, etc. birds seasonally. Visit Swakopmund, a historic colonial German town surrounded by desert and sweeping sand dunes which meet with the Atlantic Ocean. These are just few examples of Africa's incredible tourist circuits. You can club countries of your choice and form a customized itinerary for travelling in this vast continent.



- Disha Shah



# Fictionally yours

## WHERE YOU MEET ME TOO!!

“Mr. Gregory Zenda, you say? That old fool is crazy. He and his brother Joseph are nothing but a menace. I tell you, child, stay away from them.” This is the normal response that I get from all the commoners on the street. Why are the people here so annoyed with them? Other than the mission in hand I had a perfect excuse for sightseeing. I visited the West Bank and the administration of Jerusalem and by that time I decided to make a plan in order to talk to mister Grumpy - yes that is what I will call him henceforth. From the book of the poem, I found one that probably describes his behaviour but I am not sure... the title of the poem is ‘Beloved Resistance’ and one of the stanzas says:

*Don't talk to me, the anger screams*

*The temperature rises, while ftoot is ready on a tray.*

*I know you smile when the honey drips*

*I see your hunger craving for these dreams*

Ftoot is the popular Palestinian bread that is made of cheese and seeds and served with tea or honey. And as my mom says, Mr. Grumpy loves them... but I also think that the way she describes it in the poem, they hardly were able to afford it. I need some answers. I went back to the same doorstep and knocked, and knocked again and again yet no one answered the door. At last I read the poem on the book while I carried the bag of ftoot and honey in other hand. And as I continued....

*“Don't hide, don't leave I am here near you,*

*Bear the time, it will soon past”*

*“My resistance is soft, I melt my pride Beloved is your smile, enjoying while it last”* He replied and as I lifted my head I saw the door open. “You have her face but zero skill in reading poems. Now get inside!” This man leaves no opportunity to mock me... Christ help me! I placed the bag on

the table, while the other man who I think is Mr. Joseph smiled and served the bread with honey for himself. While I saw him eat, it felt odd... as if a small boy is enjoying the meal than a man. I continued to stare. “He is old but behaves like a 10 year old. Ftoot is his favourite, especially when Susie makes it for him. The poem you just read was written by her for him. Let’s get straight to the point... why are you here? “ “What is with the way you talk to me!? I am here to know more about my mother. ``”After so many years you come here to talk about HER? What a shame - did she run away from you as well!? “ “She died 12 years ago...What do you mean by as well!?” The shock on his face turned into trauma, “Sh- she died!! How could she...that man!!!” “What man?” “1985..... the USA under the UN had sent a special force to eradicate the Jews that they thought created havoc in Palestine. Almost all our families and friends were killed in their houses. My sister Susie helped us by securing our safety on the

on..

*One day I found the letter that said the deed is done*

*He killed the mere treasure that I had hidden*

*No longer I found my parents only to know they are gone*

*Tonight I stand over as culprit, only with a gun armed.*

*And here I know where I met you, the real me is gone. He walked with me and said Sun goes down and we are here together...”*

My real father was a traitor and she killed him. Then what about the story that papa..... Ohh no!! The first lyrics are not by my mother but papa.... He was with her to help her take revenge.. But why? “Because my husband was in love with your mother,” said Aunt Nina.

The end

outskirts. We were living peacefully until one day he invaded our life. Military officer in command, Senior Mathew Celvins. She fell in love with him ignoring what they did to our community. At the start I thought he was not a part of them because he helped us to settle, but later she was forced to carry you without any commitments as he had already left. Susie was totally into him. She fell sick when she didn’t know his whereabouts. Later she received a letter from him, stating he is posted in California, He had no idea that Susie was carrying you. She left us all one night and went on his search, didn’t even think about Joseph.” We turned to see a mid aged Joseph playing with toys. “Aunt Nina never said that she had brothers!? ``”I don’t know who this Nina you are talking about is. Now leave, this was enough for today.” And I left; not only from his house but also Palestine, gave a final goodbye to this city. Within two days I reached California before gathering the last inscriptions carved on the door...

“Not far but near, I am gone to find me

Questions that need to be sought Let’s talk later when the sun is behind me

Don’t follow let me go...Tonight”

Finding Mr. Mathews’ residence was no big deal, there were many memorials built in his name. According to the city he was the saviour of honour of the USA. His house was at the bank of The Lake Salton sea, whose salinity is higher than the Pacific Ocean. The house looked haunted and no one lived in it... other than a huge statue of the martyr on his grave. I felt like I came to a dead end until I examined the memorial which had carvings of the final lyrics that said:

*I am standing on this distant lake looking at the end of eve*

*The water tastes the blind belief, which I thought to have within*

*He was a charmer, the one who took my heart for fun*

*Left me barren with a small little cause to live*

-Vaishali Kanekar, TYBA

Can we even count the number of times we must have scrolled through a travel account on instagram and wished we were snuggled up in a cabin somewhere or were canoeing through a river? But the sad reality of life never fails to bring us back, in front of our screens. But we need to make the best of our situations. So to do that, scroll down and get yourself a movie to escape reality for the next 2 hours.

### 1. Dil Chahta Hai:

Find a person who has never dreamt of going on a road trip to Goa in a red convertible. That’s right! You can’t. Directed by Farhan Akhtar, the story follows three friends and their post- collegiate testing their tight knit bond. The trip to Goa with its soundtrack is the best part of the whole movie. You fall in love with the rustic charm, blue beaches and the characters. Go watch the movie and find you Chamkile Din.



### 2. Into The Wild:

This movie is the story of the journey of a young man who leaves his home in Atlanta to explore the country and eventually attempts to live off the land in Alaskan wilderness. The character of the protagonist is complex and fascinating. Whereas the scenic shots of the valleys, mountains and rivers are beautiful and mesmerizing. Together, these elements make up a masterpiece.



### 3. Zindagi Na Milegi Dobara:

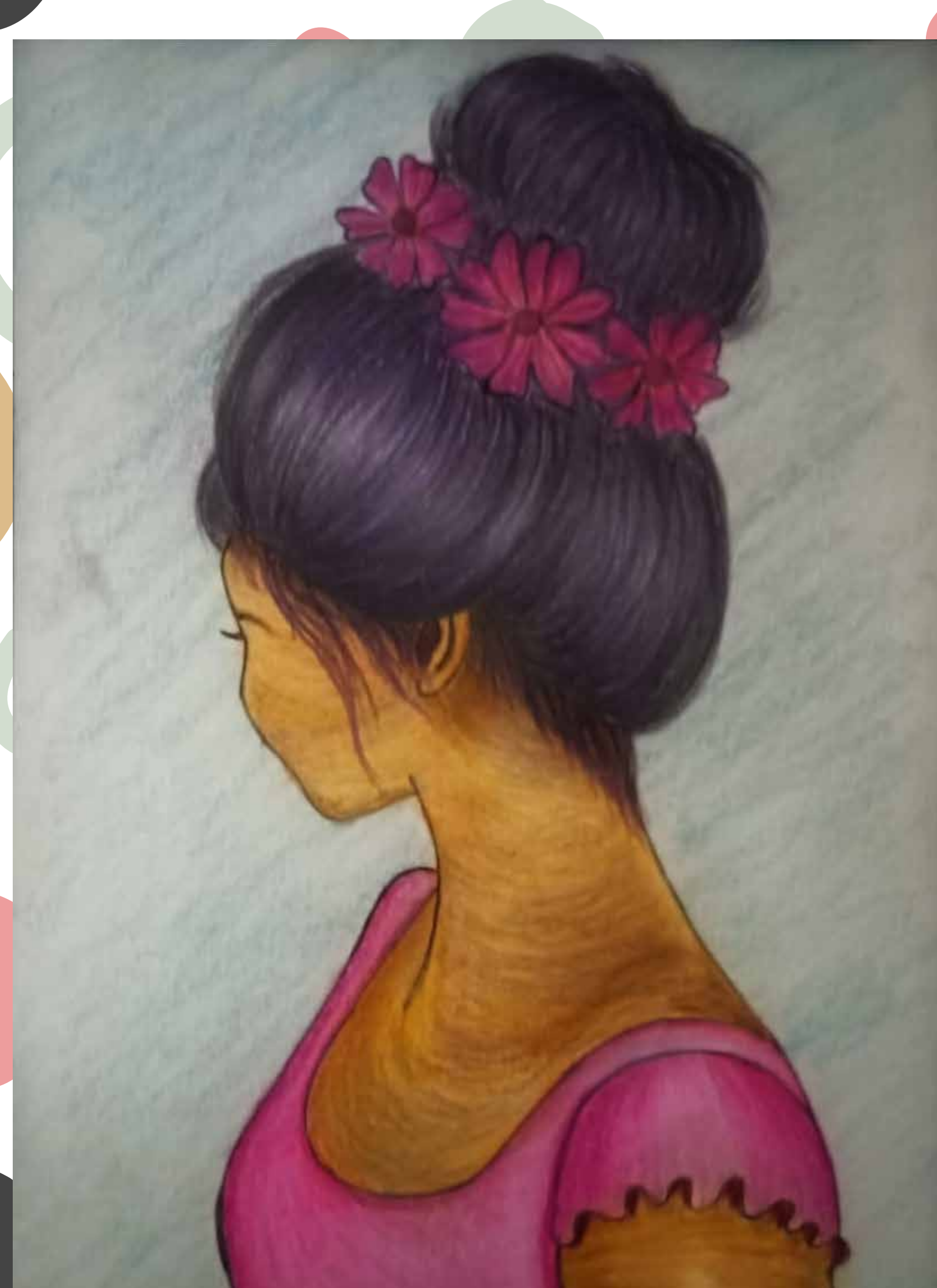
Directed by Zoya Akhtar, the movie is an inspiration for all kinds of bachelor and bachelorette parties. The characters drive through beautiful country sides and town followed by shayaris and poems in the background. The trip turns into an opportunity to mend fences, heal wounds, fall in love with life and combat their worst fears. The soundtrack and the casting are amazing. Humour is constant throughout the movie. So no matter how many times you watch it, you can never get tired of it.



-Shubhangi Pingulkar TYBA



# Art Wall



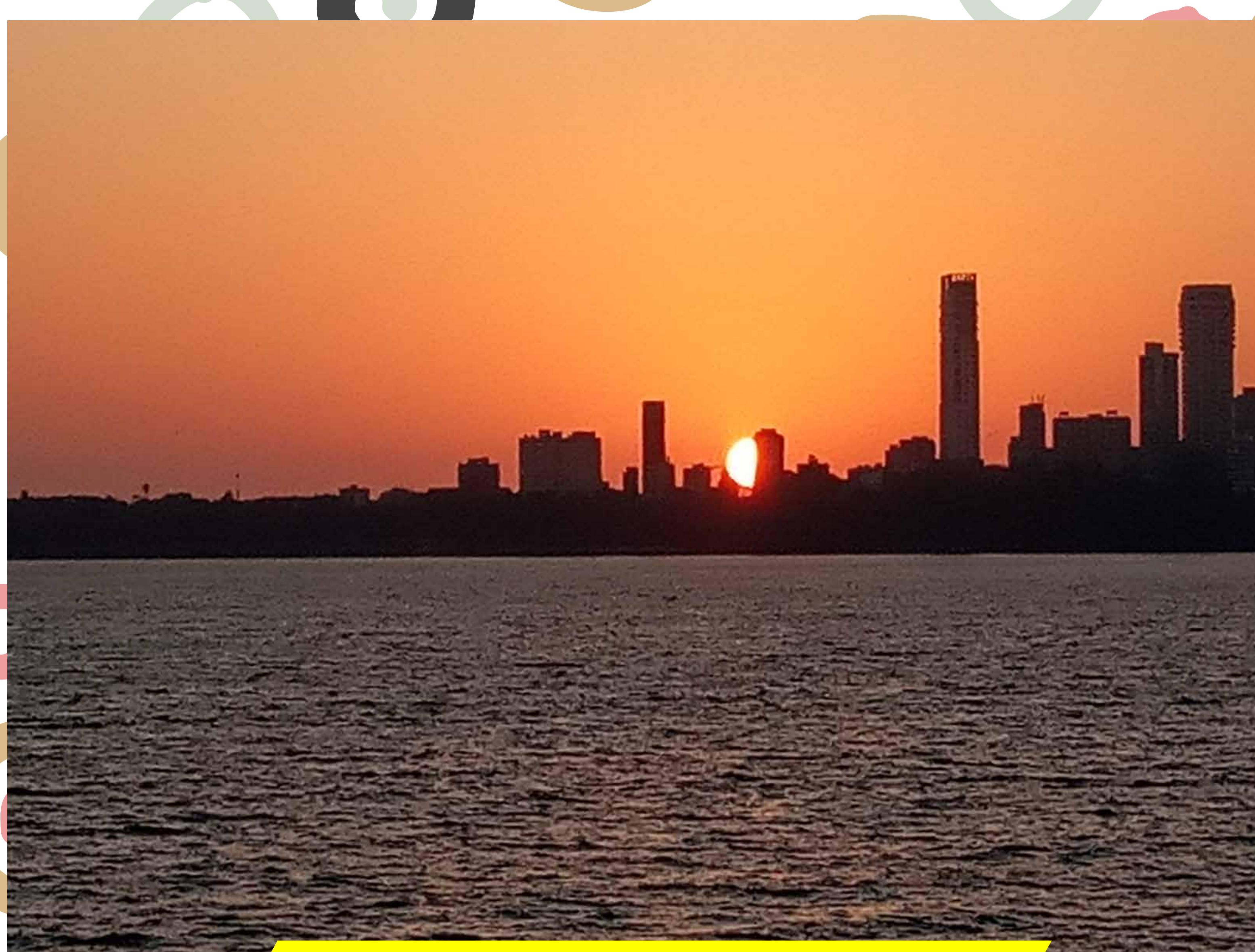
**POOJA DHEDIA**



**PREETI GAWADE**



**ISHADA KAWADE**



**VAISHALI KANEKAR**

## ***Roaming around the city (RATC)*** ***The Leonardo's Symphony***

A concert was held in the Royal Opera House, the only existing opera House in Mumbai based on Renaissance music. Various Talented artist from Italy visited and played old Renaissance instruments especially made by Leonardo Da Vinci. The instruments were - the Renaissance harp, the paper pipe and viola organization. The opera was majestic and reflected the Italian French and Spanish Art and culture.

